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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,358	11/03/2003	Kirk G. Scheckel	SCHECKELI	1126
1444	7590	09/07/2006	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			CINTINS, IVARS C	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/698,358

Applicant(s)

SCHECKEL ET AL.

Examiner

Ivars C. Cintins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) 7 and 11-26 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 and 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 1 recites removing contaminants from water by a method "consisting of contacting the water with an effective amount of at least one ruthenium compound" (see claim 1, lines 1-4), but then this claim further recites "optionally ... other sorptive media." Also, claim 4 recites utilizing the ruthenium compound coated onto or complexed with other materials. Accordingly, it is not clear what materials are excluded by the "consisting of ... optionally ..." language now recited in claim 1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5 are again rejected under 35 U.S.C. 102(b) as being anticipated by Ciampi et al. (U.S. Patent Application Publication No. 2002/0121482; hereinafter "Ciampi"). As pointed out in the previous Office action, the reference discloses a process for removing arsenic from water with a material comprising ruthenium oxide (see ¶ 0072, line 23; and ¶ 216); and this is all that is required by claims 1-3 and 5. Applicant should note that claim 1, as amended, permits the use of "other sorptive media" in combination with a ruthenium compound; and therefore, the iron salt and

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ruthenium oxide combination treatment disclosed by Ciampi is deemed to anticipate claims 1-3 and 5.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8-10 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi. As pointed out in the previous Office action, the reference discloses the claimed invention with the exception of the ionic form of the arsenic. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat water containing anionic and/or cationic arsenic by the reference process, since both of these forms of arsenic are known to be contaminants in water, and since Ciampi broadly teaches removing arsenic from water (see ¶ 216, line 9), without specifying its ionic form.

Claim 4 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi as applied above, and further in view of Benjamin et al. (U.S. Patent No. 5,911,882; hereinafter "Benjamin"). As pointed out in the previous Office action, Ciampi discloses the claimed invention with the exception of the recited support material. Benjamin teaches that it is known to coat an arsenic adsorbent material (see col. 9, line 63) on a support material such as sand (line 4 of the abstract); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the arsenic adsorbent material (see ¶ 216, line 8) of the primary reference onto a support

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material such as sand, as suggested by the secondary reference, in order to facilitate handling of this primary reference material.

Applicant's arguments filed June 19, 2006 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that "[t]here is neither disclosure nor suggestion in Ciampi of using ruthenium ions alone to treat water contaminated with arsenic." It is pointed out, however, that the "consisting of ... optionally ..." language of amended claim 1 appears to permit the use of sorptive media other than a ruthenium compound; and therefore, this claim does not preclude the iron salt and ruthenium oxide combination treatment disclosed by Ciampi.

Applicant apparently feels that claims 2-6 and 8-10 should stand or fall with parent claim 1, since no arguments have been presented as to why the additional limitations contained in these claims are sufficient to distinguish them over the references of record. In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to treat water containing arsenic in the ionic forms recited in claims 6 and 8-10 by the reference process, since these ionic forms of arsenic are known to be contaminants in water, and since Ciampi broadly teaches removing arsenic from water (see ¶ 216, line 9), without specifying its ionic form. Furthermore, Benjamin teaches that it is known to coat an arsenic adsorbent material (see col. 9, line 63) on a support material such as sand (line 4 of the abstract); and it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the arsenic adsorbent material (see ¶ 216, line 8) of Ciampi onto a support

material such as the sand of the secondary reference, in order to facilitate its handling in this primary reference.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
September 2, 2006